

Mewbourne Oil Co

Eddy County, New Mexico

Sec 36, T25S, R27E

Cooksey 36 PA State Com #1H

3001539427

Wellbore #1

Design: Wellbore #1

DDC Survey Report

16 September, 2013



DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Cooksey 36 PA State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3105.0usft (Patterson #75)
Site:	Sec 36, T25S, R27E	MD Reference:	WELL @ 3105.0usft (Patterson #75)
Well:	Cooksey 36 PA State Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Project:	Eddy County, New Mexico		
Map System:	US State Plane 1927 (Exact solution)	System Datum:	Mean Sea Level
Geo Datum:	NAD 1927 (NADCON CONUS)		
Map Zone:	New Mexico East 3001		

Site		Sec 36, T25S, R27E			
Site Position:		Northing:	392,778.32 usft	Latitude:	32° 4' 46.954 N
From:	Map	Easting:	561,175.38 usft	Longitude:	104° 8' 8.949 W
Position Uncertainty:	0.0 usft	Slot Radius:	13-3/16 "	Grid Convergence:	0.10 °

Well:	Cooksey 36 PA State Com #1H					
Well Position	+N/-S	0.0 usft	Northing:	392,778.08 usft	Latitude:	32° 4' 46.954 N
	+E/-W	0.0 usft	Easting:	561,005.50 usft	Longitude:	104° 8' 10.923 W
Position Uncertainty	0.0 usft	Wellhead Elevation:	usft	Ground Level:	3,085.0 usft	

Wellbore		Wellbore #1			
Magnetics	Model Name	Sample Date	Declination	Dip/Angle	Field Strength
			(°)	(°)	(nT)
	IGRF2010	4/18/2013	7.61	59.91	48,285

Design:	Wellbore #1				
Audit Notes:					
Version:	1.0	Phase:	ACTUAL	Tie On Depth:	0.0
Vertical Section:	Depth From (TVD)	+N/-S	+E/-W	Direction	
	(usft)	(usft)	(usft)	(°)	
	0.0	0.0	0.0	1.28	

Survey Program		Date	9/16/2013		
From (usft)	To (usft)	Survey (Wellbore)	Tool Name	Description	
100.0	7,228.0	Gyro (Wellbore #1)	Good_gyro	Good Gyro	
7,313.0	12,370.0	DDC MWD (Wellbore #1)	MWD default	MWD - Standard	

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.73	203.85	100.0	-0.6	-0.3	-0.6	0.73	0.73	0.00
200.0	1.20	196.56	200.0	-2.2	-0.8	-2.2	0.48	0.47	-7.29
300.0	1.32	192.56	300.0	-4.3	-1.4	-4.3	0.15	0.12	-4.00
400.0	1.85	194.52	399.9	-7.0	-2.0	-7.0	0.53	0.53	1.96
500.0	2.68	196.88	499.8	-10.8	-3.1	-10.9	0.84	0.83	2.36
600.0	3.09	204.03	599.7	-15.5	-4.9	-15.6	0.54	0.41	7.15
700.0	2.48	210.03	699.6	-19.8	-7.1	-20.0	0.68	-0.61	6.00
800.0	2.36	208.32	799.5	-23.5	-9.1	-23.7	0.14	-0.12	-1.71
900.0	2.38	195.09	899.4	-27.3	-10.6	-27.6	0.55	0.02	-13.23

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Cooksey 36 PA State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3105.0usft (Patterson #75)
Site:	Sec 36, T25S, R27E	MD Reference:	WELL @ 3105.0usft (Patterson #75)
Well:	Cooksey 36 PA State Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N-S (usft)	+E-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
1,000.0	2.47	191.73	999.3	-31.4	-11.6	-31.7	0.17	0.09	-3.36
1,100.0	2.14	184.71	1,099.3	-35.4	-12.2	-35.7	0.43	-0.33	-7.02
1,200.0	2.07	193.68	1,199.2	-39.0	-12.8	-39.3	0.34	-0.07	8.97
1,300.0	2.09	195.31	1,299.1	-42.5	-13.7	-42.8	0.06	0.02	1.63
1,400.0	2.39	196.19	1,399.0	-46.3	-14.8	-46.6	0.30	0.30	0.88
1,500.0	2.14	186.26	1,499.0	-50.2	-15.5	-50.5	0.46	-0.25	-9.93
1,600.0	2.99	149.67	1,598.9	-54.3	-14.4	-54.6	1.80	0.85	-36.59
1,700.0	3.70	109.94	1,698.7	-57.6	-10.1	-57.8	2.37	0.71	-39.73
1,800.0	4.22	108.03	1,798.5	-59.9	-3.5	-59.9	0.54	0.52	-1.91
1,900.0	5.71	104.46	1,898.1	-62.2	4.8	-62.1	1.52	1.49	-3.57
2,000.0	6.84	109.93	1,997.5	-65.5	15.2	-65.2	1.28	1.13	5.47
2,100.0	7.68	105.07	2,096.7	-69.3	27.2	-68.6	1.04	0.84	-4.86
2,200.0	6.44	104.78	2,195.9	-72.4	39.1	-71.5	1.24	-1.24	-0.29
2,300.0	4.84	101.87	2,295.4	-74.7	48.7	-73.6	1.62	-1.60	-2.91
2,400.0	4.11	100.93	2,395.1	-76.3	56.3	-75.0	0.73	-0.73	-0.94
2,500.0	3.60	105.53	2,494.9	-77.8	62.9	-76.4	0.60	-0.51	4.60
2,600.0	2.87	106.53	2,594.8	-79.4	68.3	-77.8	0.73	-0.73	1.00
2,700.0	2.70	104.37	2,694.6	-80.7	73.0	-79.0	0.20	-0.17	-2.16
2,800.0	2.55	107.85	2,794.5	-81.9	77.4	-80.2	0.22	-0.15	3.48
2,900.0	2.43	101.58	2,894.4	-83.0	81.6	-81.2	0.30	-0.12	-6.27
3,000.0	2.40	102.05	2,994.3	-83.9	85.7	-82.0	0.04	-0.03	0.47
3,100.0	2.00	109.20	3,094.3	-84.9	89.4	-82.9	0.48	-0.40	7.15
3,200.0	1.44	112.56	3,194.2	-86.0	92.2	-83.9	0.57	-0.56	3.36
3,300.0	1.48	115.34	3,294.2	-87.0	94.5	-84.9	0.08	0.04	2.78
3,400.0	1.35	111.58	3,394.2	-88.0	96.8	-85.8	0.16	-0.13	-3.76
3,500.0	1.20	108.19	3,494.1	-88.7	98.9	-86.5	0.17	-0.15	-3.39
3,600.0	1.16	103.56	3,594.1	-89.3	100.8	-87.0	0.10	-0.04	-4.63
3,700.0	0.95	122.03	3,694.1	-90.0	102.5	-87.7	0.40	-0.21	18.47
3,800.0	1.06	127.71	3,794.1	-91.0	104.0	-88.6	0.15	0.11	5.68
3,900.0	0.81	136.39	3,894.1	-92.1	105.2	-89.7	0.29	-0.25	8.68
4,000.0	0.84	149.50	3,994.1	-93.2	106.0	-90.8	0.19	0.03	13.11
4,100.0	0.66	150.77	4,094.1	-94.3	106.7	-91.9	0.18	-0.18	1.27
4,200.0	0.66	155.82	4,194.0	-95.4	107.2	-93.0	0.06	0.00	5.05
4,300.0	0.76	160.39	4,294.0	-96.5	107.7	-94.1	0.11	0.10	4.57
4,400.0	0.83	176.77	4,394.0	-97.9	107.9	-95.4	0.24	0.07	16.38
4,500.0	0.80	173.42	4,494.0	-99.3	108.1	-96.8	0.06	-0.03	-3.35
4,600.0	0.72	195.91	4,594.0	-100.6	108.0	-98.1	0.31	-0.08	22.49
4,700.0	0.80	191.73	4,694.0	-101.9	107.6	-99.4	0.10	0.08	-4.18
4,800.0	0.69	197.46	4,794.0	-103.1	107.3	-100.7	0.13	-0.11	5.73
4,900.0	0.77	187.04	4,894.0	-104.4	107.1	-102.0	0.15	0.08	-10.42
5,000.0	0.74	183.06	4,994.0	-105.7	106.9	-103.3	0.06	-0.03	-3.98
5,100.0	0.75	179.23	5,094.0	-107.0	106.9	-104.6	0.05	0.01	-3.83
5,200.0	0.85	174.98	5,194.0	-108.4	107.0	-106.0	0.12	0.10	-4.25

DDC Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Cooksey 36 PA State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3105.0usft (Patterson #75)
Site:	Sec 36, T25S, R27E	MD Reference:	WELL @ 3105.0usft (Patterson #75)
Well:	Cooksey 36 PA State Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
5,300.0	1.02	167.80	5,293.9	-110.0	107.2	-107.6	0.21	0.17	-7.18
5,400.0	0.74	155.81	5,393.9	-111.4	107.7	-109.0	0.33	-0.28	-11.99
5,500.0	1.03	161.10	5,493.9	-112.9	108.3	-110.4	0.30	0.29	5.29
5,600.0	1.06	170.94	5,593.9	-114.6	108.7	-112.2	0.18	0.03	9.84
5,700.0	1.03	189.80	5,693.9	-116.4	108.7	-114.0	0.34	-0.03	18.86
5,800.0	1.20	218.58	5,793.9	-118.1	107.9	-115.7	0.58	0.17	28.78
5,900.0	1.33	234.65	5,893.8	-119.6	106.3	-117.2	0.38	0.13	16.07
6,000.0	1.40	229.82	5,993.8	-121.1	104.4	-118.7	0.13	0.07	-4.83
6,100.0	1.06	237.51	6,093.8	-122.4	102.7	-120.1	0.38	-0.34	7.69
6,200.0	0.84	249.10	6,193.8	-123.1	101.2	-120.9	0.29	-0.22	11.59
6,300.0	0.72	256.96	6,293.8	-123.5	99.9	-121.3	0.16	-0.12	7.86
6,400.0	1.12	283.73	6,393.8	-123.5	98.4	-121.2	0.58	0.40	26.77
6,500.0	0.98	281.59	6,493.7	-123.1	96.6	-120.9	0.15	-0.14	-2.14
6,600.0	1.43	278.91	6,593.7	-122.7	94.5	-120.5	0.45	0.45	-2.68
6,700.0	2.10	303.89	6,693.7	-121.5	91.8	-119.4	1.01	0.67	24.98
6,800.0	2.58	293.71	6,793.6	-119.5	88.2	-117.5	0.63	0.48	-10.18
6,900.0	2.03	285.71	6,893.5	-118.2	84.4	-116.2	0.64	-0.55	-8.00
7,000.0	1.65	291.80	6,993.5	-117.1	81.4	-115.3	0.43	-0.38	6.09
7,100.0	1.58	254.21	7,093.4	-117.0	78.7	-115.2	1.04	-0.07	-37.59
7,200.0	2.05	206.31	7,193.4	-119.0	76.6	-117.2	1.53	0.47	-47.90
Tie Into Gyro @ 7228' MD / 7221' TVD									
7,228.0	2.03	204.35	7,221.4	-119.9	76.2	-118.1	0.26	-0.07	-7.00
7,313.0	1.60	358.30	7,306.3	-120.1	75.5	-118.3	4.16	-0.51	181.12
7,344.0	6.10	18.50	7,337.3	-118.1	76.0	-116.3	14.94	14.52	65.16
7,376.0	10.30	14.10	7,368.9	-113.7	77.2	-111.9	13.26	13.13	-13.75
7,407.0	13.40	5.70	7,399.3	-107.4	78.3	-105.6	11.42	10.00	-27.10
7,439.0	17.30	2.10	7,430.1	-99.0	78.8	-97.2	12.54	12.19	-11.25
7,470.0	21.50	4.00	7,459.4	-88.7	79.4	-86.9	13.70	13.55	6.13
7,502.0	25.80	3.00	7,488.7	-75.9	80.2	-74.1	13.50	13.44	-3.13
7,533.0	29.20	359.00	7,516.2	-61.6	80.4	-59.8	12.48	10.97	-12.90
7,565.0	31.30	356.80	7,543.8	-45.5	79.8	-43.7	7.42	6.56	-6.88
7,596.0	33.80	356.30	7,569.9	-28.8	78.8	-27.0	8.11	8.06	-1.61
7,628.0	37.80	356.80	7,595.9	-10.1	77.7	-8.4	12.53	12.50	1.56
Crossed Hard Line @ 7645' MD / 7609' TVD									
7,644.6	39.46	357.50	7,608.8	0.2	77.1	1.9	10.33	9.99	4.20
7,660.0	41.00	358.10	7,620.6	10.2	76.8	11.9	10.33	10.01	3.92
7,691.0	44.50	359.00	7,643.4	31.2	76.2	32.9	11.46	11.29	2.90
7,722.0	46.00	359.30	7,665.2	53.2	75.9	54.9	4.89	4.84	0.97
7,754.0	48.20	359.80	7,687.0	76.6	75.7	78.3	6.97	6.88	1.56
7,785.0	51.00	0.60	7,707.1	100.2	75.8	101.9	9.24	9.03	2.58
7,817.0	53.40	0.40	7,726.7	125.5	76.0	127.2	7.52	7.50	-0.63
7,849.0	56.00	359.90	7,745.2	151.6	76.1	153.3	8.22	8.13	-1.56
7,880.0	59.00	359.80	7,761.8	177.8	76.0	179.4	9.68	9.68	-0.32
7,912.0	62.30	0.00	7,777.5	205.7	76.0	207.3	10.33	10.31	0.63

DDC Survey Report



Company:	Mewbourne Oil Co.	Local Co-ordinate Reference:	Well Cooksey 36 PA State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3105.0usft (Patterson #75)
Site:	Sec 36, T25S, R27E	MD Reference:	WELL @ 3105.0usft (Patterson #75)
Well:	Cooksey 36 PA State Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey

Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)
7,944.0	65.10	1.10	7,791.7	234.4	76.3	236.0	9.28	8.75	3.44
7,975.0	68.00	1.20	7,804.0	262.8	76.8	264.4	9.36	9.35	0.32
8,007.0	71.10	1.10	7,815.2	292.8	77.4	294.4	9.69	9.69	-0.31
8,038.0	73.60	1.70	7,824.6	322.3	78.2	324.0	8.27	8.06	1.94
8,070.0	76.60	1.90	7,832.8	353.2	79.1	354.9	9.39	9.38	0.63
8,101.0	78.50	1.90	7,839.5	383.4	80.1	385.1	6.13	6.13	0.00
8,133.0	80.20	1.60	7,845.4	414.9	81.1	416.6	5.39	5.31	-0.94
8,151.0	82.40	0.70	7,848.1	432.7	81.4	434.4	13.18	12.22	-5.00
8,254.0	89.00	358.40	7,855.9	535.3	80.6	537.0	6.78	6.41	-2.23
8,285.0	89.10	358.10	7,856.4	566.3	79.7	567.9	1.02	0.32	-0.97
8,380.0	90.50	357.40	7,856.7	661.2	76.0	662.7	1.65	1.47	-0.74
8,475.0	90.90	357.40	7,855.5	756.1	71.6	757.5	0.42	0.42	0.00
8,570.0	91.70	359.10	7,853.4	851.0	68.7	852.4	1.98	0.84	1.79
8,665.0	91.20	1.90	7,851.0	946.0	69.6	947.3	2.99	-0.53	2.95
8,760.0	91.20	1.40	7,849.0	1,040.9	72.3	1,042.3	0.53	0.00	-0.53
8,855.0	88.60	1.60	7,849.2	1,135.9	74.8	1,137.3	2.74	-2.74	0.21
8,950.0	89.20	1.40	7,851.0	1,230.8	77.3	1,232.3	0.67	0.63	-0.21
9,045.0	89.20	1.90	7,852.3	1,325.8	80.0	1,327.3	0.53	0.00	0.53
9,139.0	87.80	0.90	7,854.8	1,419.7	82.3	1,421.2	1.83	-1.49	-1.06
9,234.0	88.70	0.90	7,857.7	1,514.7	83.8	1,516.2	0.95	0.95	0.00
9,329.0	89.60	0.70	7,859.1	1,609.7	85.1	1,611.2	0.97	0.95	-0.21
9,424.0	90.50	1.20	7,859.0	1,704.6	86.7	1,706.2	1.08	0.95	0.53
9,519.0	89.70	358.60	7,858.8	1,799.6	86.5	1,801.1	2.86	-0.84	-2.74
9,614.0	89.60	356.70	7,859.4	1,894.5	82.6	1,895.9	2.00	-0.11	-2.00
9,708.0	90.50	358.10	7,859.3	1,988.4	78.4	1,989.7	1.77	0.96	1.49
9,803.0	91.50	358.10	7,857.7	2,083.4	75.2	2,084.5	1.05	1.05	0.00
9,898.0	90.00	357.50	7,856.4	2,178.3	71.6	2,179.4	1.70	-1.58	-0.63
9,993.0	90.10	359.80	7,856.3	2,273.3	69.3	2,274.2	2.42	0.11	2.42
10,088.0	90.40	1.10	7,855.9	2,368.3	70.1	2,369.2	1.40	0.32	1.37
10,183.0	88.80	359.60	7,856.6	2,463.2	70.7	2,464.2	2.31	-1.68	-1.58
10,278.0	88.80	359.00	7,858.6	2,558.2	69.5	2,559.1	0.63	0.00	-0.63
10,373.0	90.90	0.20	7,858.8	2,653.2	68.8	2,654.1	2.55	2.21	1.26
10,468.0	90.00	0.50	7,858.1	2,748.2	69.4	2,749.1	1.00	-0.95	0.32
10,562.0	91.20	1.40	7,857.1	2,842.2	71.0	2,843.1	1.60	1.28	0.96
10,657.0	87.60	0.30	7,858.1	2,937.1	72.4	2,938.0	3.96	-3.79	-1.16
10,752.0	88.00	0.30	7,861.7	3,032.1	72.9	3,032.9	0.42	0.42	0.00
10,846.0	88.70	0.00	7,864.4	3,126.0	73.1	3,126.9	0.81	0.74	-0.32
10,940.0	89.50	0.20	7,865.9	3,220.0	73.3	3,220.9	0.88	0.85	0.21
11,035.0	90.40	359.50	7,866.0	3,315.0	73.1	3,315.8	1.20	0.95	-0.74
11,130.0	91.20	0.90	7,864.7	3,410.0	73.4	3,410.8	1.70	0.84	1.47
11,225.0	90.40	1.10	7,863.4	3,505.0	75.0	3,505.8	0.87	-0.84	0.21
11,320.0	90.70	1.20	7,862.4	3,600.0	76.9	3,600.8	0.33	0.32	0.11
11,415.0	91.40	0.30	7,860.7	3,694.9	78.2	3,695.8	1.20	0.74	-0.95

DDC Survey Report



Company:	Mewbourne Oil Co	Local Co-ordinate Reference:	Well Cooksey 36 PA State Com #1H
Project:	Eddy County, New Mexico	TVD Reference:	WELL @ 3105.0usft (Patterson #75)
Site:	Sec 36, T25S, R27E	MD Reference:	WELL @ 3105.0usft (Patterson #75)
Well:	Cooksey 36 PA State Com #1H	North Reference:	Grid
Wellbore:	Wellbore #1	Survey Calculation Method:	Minimum Curvature
Design:	Wellbore #1	Database:	EDM 5000.1 Single User Db

Survey										
Measured Depth (usft)	Inclination (°)	Azimuth (°)	Vertical Depth (usft)	+N/-S (usft)	+E/-W (usft)	Vertical Section (usft)	Dogleg Rate (°/100usft)	Build Rate (°/100usft)	Turn Rate (°/100usft)	
11,510.0	92.90	0.00	7,857.1	3,789.9	78.4	3,790.7	1.61	1.58	-0.32	
11,573.0	92.30	1.20	7,854.3	3,852.8	79.1	3,853.6	2.13	-0.95	1.90	
11,636.0	87.70	0.70	7,854.3	3,915.8	80.1	3,916.6	7.34	-7.30	-0.79	
11,700.0	89.20	0.50	7,856.0	3,979.7	80.8	3,980.6	2.36	2.34	-0.31	
11,763.0	87.80	359.50	7,857.7	4,042.7	80.8	4,043.5	2.73	-2.22	-1.59	
11,826.0	88.80	359.60	7,859.5	4,105.7	80.3	4,106.5	1.60	1.59	0.16	
11,889.0	89.80	0.20	7,860.3	4,168.7	80.2	4,169.4	1.85	1.59	0.95	
11,952.0	88.10	358.20	7,861.5	4,231.7	79.3	4,232.4	4.17	-2.70	-3.17	
12,016.0	88.50	357.00	7,863.4	4,295.6	76.7	4,296.2	1.98	0.63	-1.88	
12,079.0	88.70	356.70	7,864.9	4,358.5	73.2	4,359.0	0.57	0.32	-0.48	
12,142.0	91.30	357.20	7,864.9	4,421.4	69.8	4,421.8	4.20	4.13	0.79	
12,205.0	90.90	359.00	7,863.7	4,484.3	67.8	4,484.7	2.93	-0.63	2.86	
12,268.0	91.60	359.60	7,862.3	4,547.3	67.0	4,547.7	1.46	1.11	0.95	
12,320.0	92.40	358.40	7,860.5	4,599.3	66.1	4,599.6	2.77	1.54	-2.31	
TD @ 12370' MD / 7858' TVD										
12,370.0	92.40	358.40	7,858.4	4,649.2	64.7	4,649.5	0.00	0.00	0.00	

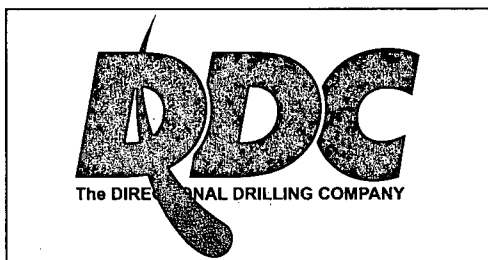
Design Annotations					
Measured Depth (usft)	Vertical Depth (usft)	Local Coordinates			
		+N/-S (usft)	+E/-W (usft)	Comment	
7,228.0	7,221.4	-119.9	76.2	Tie into Gyro @ 7228' MD / 7221' TVD	
7,644.6	7,608.8	0.2	77.1	Crossed Hard Line @ 7645' MD / 7609' TVD	
12,370.0	7,858.4	4,649.2	64.7	TD @ 12370' MD / 7858' TVD	

Checked By: _____ Approved By: _____ Date: _____

Company Name: Mewbourne Oil Co
Cooksey 36 PA State Com #1H
Eddy County, New Mexico
Rig: Patterson #75
Created By: James Dawson
Date: 9/16/2013

Cooksey 36 PA State Com #1H
Eddy County, New Mexico
Q130359 & WT-13705
Design #5

Mewbourne Oil Company



Azimuths to Grid North
Correction: 7.50°

Magnetic Field
Strength: 48285.3snT
Dip Angle: 59.91°
Date: 4/18/2013
Model: IGRF2010

PROJECT DETAILS: Eddy County, New Mexico

Geodetic System: US State Plane 1927 (Exact solution)
Datum: NAD 1927 (NADCON CONUS)
Ellipsoid: Clarke 1866
Zone: New Mexico East 3001
System Datum: Mean Sea Level

WELL DETAILS: Cooksey 36 PA State Com #1H

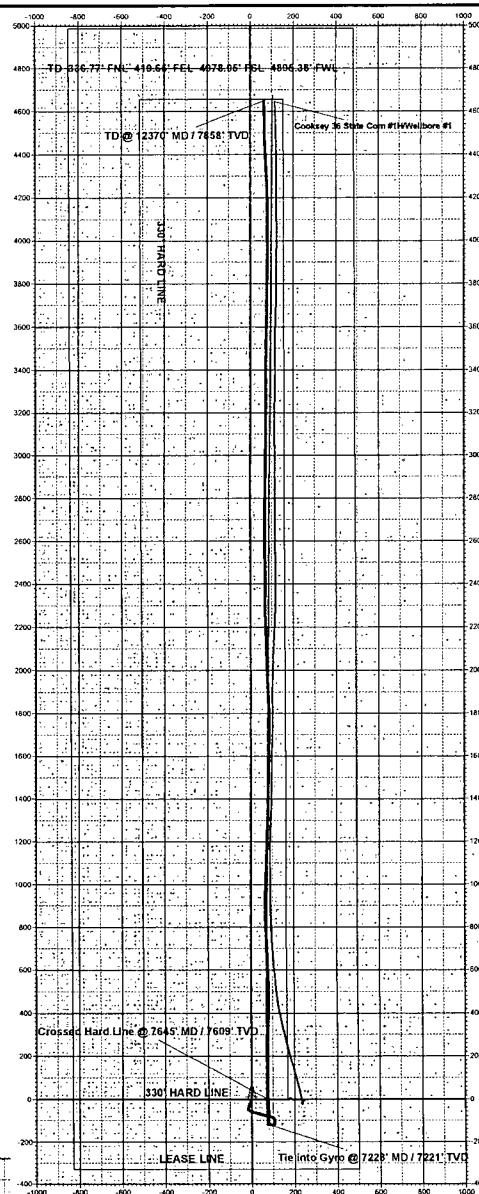
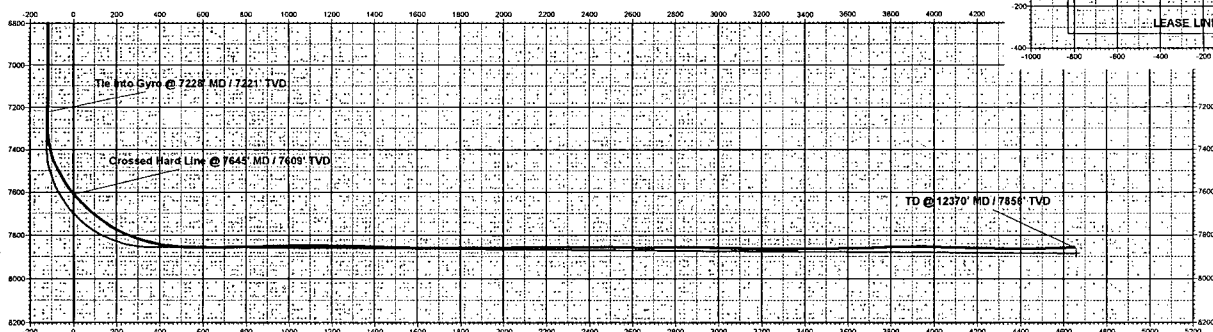
*N-S	*E-W	Ground Level:	Eastings	Latitudes	Longitudes
0.0	0.0	392778.08	561005.50	32° 4' 46.954 N	104° 8' 10.923 W

DESIGN TARGET DETAILS

Name	TVD	*N-S	*E-W	Northing	Eastings	Latitude	Longitude
PBHL Cooksey 36 State Com #2H Design #4 - plan hits target center	7885.0	4656.0	104.0	397434.06	561109.53	32° 6' 33.030 N	104° 8' 9.615 W

ANNOTATIONS

MD	Inc	Azi	TVD	*N-S	*E-W	Vsect	Departure	Annotation
7228.0	2.03	204.35	7221.4	-119.9	76.2	-118.1	248.2	Tie into Gyro @ 7228' MD / 7221' TVD
7644.6	39.46	357.59	7605.8	0.2	77.1	1.9	371.3	Crossed Hard Line @ 7645' MD / 7609' TVD
12370.0	92.40	358.40	7885.4	4649.2	64.7	4649.5	6022.0	TD @ 12370' MD / 7858' TVD



Operating Company Mewbourne
 Well Name & Number Cooksey 36 PA St Com #1H
 Sales Ticket Number 5796421
 Date 9/15/2013

Company Rep Sandy Bass
 Field Santo Nino
 BOT Service Rep Joseph Haynes
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	8,205.00	9,960	6,230
Top Liner	4.500	13.50	110000	3.920	3.795	LT&C	0.01492	4,380.32	12,410	10,680
Bott Liner										
TVD		7,862.00		KOP		7,748.00		Open Hole	6.125	Casing Vol. (bbl)
Carry Fluid Weight (ppg)			8.4		Propant Content (ppa)				Max Drill Out Size	
									0	

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seat ID	Shear Press	Max Rate (BPM)	Displ (BBL)
Liner Top	1	JR Setting Sleeve_RH Profile	7965.48	4.00	5.750	4.000				

Zone Length										
20	JR Sleeve_S3 Hyd Set Packer		7969.48	5.53	5.875	3.875		1670		
	4-1/2-13.5 LTC Nipple		7975.01	6.72	4.500	3.920				
	8 Joints of 4-1/2-13.5 LTC Casing		7981.73	267.62	4.500	3.920				
	20	3/625 EX Frac Sleeve	8249.35	2.40	5.750		3/525	2286		
19	1 Joint of 4-1/2-13.5 LTC Casing		8251.75	114.50	4.500	3.920				
	Baker Open Hole Packer		8386.25	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		8370.14	76.76	4.500	3.920				
	19	3/500 EX Frac Sleeve	8446.90	2.10	5.750		3/400	2286		
18	1 Joint of 4-1/2-13.5 LTC Casing		8449.30	115.25	4.500	3.920				
	Baker Open Hole Packer		8564.55	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		8568.44	114.41	4.500	3.920				
	18	3/375 EX Frac Sleeve	8682.85	2.40	5.750		3/275	2286		
17	1 Joint of 4-1/2-13.5 LTC Casing		8685.25	114.67	4.500	3.920				
	Baker Open Hole Packer		8799.92	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		8803.81	75.84	4.500	3.920				
	17	3/250 EX Frac Sleeve	8879.65	2.40	5.750		3/150	2286		
16	1 Joint of 4-1/2-13.5 LTC Casing		8882.05	115.11	4.500	3.920				
	Baker Open Hole Packer		8997.15	3.89	5.820	3.875		2154		
	2 Joints of 4-1/2-13.5 LTC Casing		9001.05	115.04	4.500	3.920				
	16	3/125 EX Frac Sleeve	9116.09	2.40	5.750		3/025	2286		
	2 Joints of 4-1/2-13.5 LTC Casing		9118.49	114.34	4.500	3.920				
	Baker Open Hole Packer		9232.63	3.89	5.820	3.875		2154		

Operating Company Mewbourne
 Well Name & Number Cooksey 36 PA St Com #1H
 Sales Ticket Number 5796421
 Date 9/15/2013

Company Rep Sandy Bass
 Field Santo Nino
 BOT Service Rep Joseph Haynes
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	8,205.00	9,960	6,230
Top Liner	4.500	13.50	110000	3.920	3.795	LT&C	0.01492	4,380.32	12,410	10,680
Bott Liner										
TVD		7,862.00	KOP		7,748.00	Open Hole		6.125	Casing Vol. (bbl)	
Carry Fluid Weight (ppg)		8.4	Propant Content (ppa)					Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seal ID	Shear Press	Max Rate (BPM)	Displ (BBL)
15		2 Joints of 4-1/2-13.5 LTC Casing	9236.72	72.92	4.500	3.920				
	15	31000 EX Frac Sleeve	9309.64	2.40	5.750		21900	2286		
		1 Joint of 4-1/2-13.5 LTC Casing	9312.04	115.35	4.500	3.920				
14		Baker Open Hole Packer	9427.39	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9431.28	114.89	4.500	3.920				
	14	21875 EX Frac Sleeve	9546.17	2.40	5.750		21775	2286		
13		2 Joints of 4-1/2-13.5 LTC Casing	9548.57	114.86	4.500	3.920				
		Baker Open Hole Packer	9663.45	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	9667.32	76.50	4.500	3.920				
12		2 Joints of 4-1/2-13.5 LTC Casing	9743.82	2.40	5.750		21650	2286		
		1 Joint of 4-1/2-13.5 LTC Casing	9746.22	114.97	4.500	3.920				
		Baker Open Hole Packer	9861.19	3.89	5.820	3.875		2154		
11		2 Joints of 4-1/2-13.5 LTC Casing	9865.08	114.41	4.500	3.920				
	12	21625 EX Frac Sleeve	9979.49	2.40	5.750		21525	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	9981.89	114.86	4.500	3.920				
10		Baker Open Hole Packer	10096.75	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10100.64	76.67	4.500	3.920				
	11	21500 EX Frac Sleeve	10177.31	2.40	5.750		21400	2286		
9		1 Joint of 4-1/2-13.5 LTC Casing	10179.71	114.44	4.500	3.920				
		Baker Open Hole Packer	10294.15	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	10298.04	113.53	4.500	3.920				
10	10	21375 EX Frac Sleeve	10411.57	2.40	5.750		21275	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	10413.97	114.01	4.500	3.920				
		Baker Open Hole Packer	10527.98	3.89	5.820	3.875		2154		
9		1 Joint of 4-1/2-13.5 LTC Casing	10531.87	76.01	4.500	3.920				
	9	21250 EX Frac Sleeve	10607.88	2.40	5.750		21150	2286		

Operating Company Mewbourne
 Well Name & Number Cooksey 36 PA St Com #1H
 Sales Ticket Number 5796421
 Date 9/15/2013

Company Rep Sandy Bass
 Field Santo Nino
 BOT Service Rep Joseph Haynes
 District Location Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse	
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	8,205.00	9,960	6,230	
Top Liner	4.500	13.50	110000	3.920	3.795	LT&C	0.01492	4,380.32	12,410	10,680	
Bott Liner											
TVD	7,862.00		KOP		7,748.00		Open Hole	6.125	Casing Vol. (bbl)		
Carry Fluid Weight (ppg)			8.4		Propant Content (ppa)				Max Drill Out Size		0

	Comm. Number	Description	Depth	Length	OD	ID	Ball Seal ID	Shear Press	Max Rate (BPM)	Displ (BBL)
8		2 Joints of 4-1/2-13.5 LTC Casing	10610.28	114.89	4.500	3.920				
		Baker Open Hole Packer	10725.47	3.89	5.820	3.875		2154		
		1 Joint of 4-1/2-13.5 LTC Casing	10729.06	114.20	4.500	3.920				
	8	2-125 EX Frac Sleeve	10843.26	2.40	5.750		21025	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	10845.66	113.96	4.500	3.920				
7		Baker Open Hole Packer	10959.52	3.89	5.820	3.875		2154		
		1 Joint of 4-1/2-13.5 LTC Casing	10963.51	76.40	4.500	3.920				
	7	2-000 EX Frac Sleeve	11039.91	2.40	5.750		11900	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	11042.31	114.92	4.500	3.920				
		Baker Open Hole Packer	11157.23	3.89	5.820	3.875		2154		
6		1 Joint of 4-1/2-13.5 LTC Casing	11161.12	113.30	4.500	3.920				
	6	1-875 EX Frac Sleeve	11274.42	2.40	5.750		11775	2286		
		2 Joints of 4-1/2-13.5 LTC Casing	11276.82	114.48	4.500	3.920				
		Baker Open Hole Packer	11391.30	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11395.19	76.96	4.500	3.920				
5	5	1-750 EX Frac Sleeve	11472.15	2.40	5.750		11650	2286		
		1 Joint of 4-1/2-13.5 LTC Casing	11474.55	113.09	4.500	3.920				
		Baker Open Hole Packer	11587.61	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11591.53	115.05	4.500	3.920				
	4	1-625 EX Frac Sleeve	11706.58	2.40	5.750		11525	2286		
4		2 Joints of 4-1/2-13.5 LTC Casing	11708.98	115.50	4.500	3.920				
		Baker Open Hole Packer	11824.48	3.89	5.820	3.875		2154		
		2 Joints of 4-1/2-13.5 LTC Casing	11828.37	76.75	4.500	3.920				
	3	1-500 DBL Ball Frac Sleeve	11905.12	2.40	5.750		11400	2286		
		1 Joint of 4-1/2-13.5 LTC Casing	11907.52	113.65	4.500	3.920				
3		Baker Open Hole Packer	12021.17	3.89	5.820	3.875		2154		

Company Rep	Sandy Bass
Field	Santo Nino
BOT Service Rep	Joseph Haynes
District Location	Odessa, Texas, USA



	Size	Weight	Grade	ID	Drift	Thread	Capacity	Length	Burst	Collapse
Casing	7.000	26.00	P-110	6.276	6.151	LT&C	0.03826	8,205.00	9,960	6,230
Top Liner	4.500	13.50	110000	3.920	3.795	LT&C	0.01492	4,380.32	12,410	10,680
Bott Liner										
TVD	7,862.00		KOP		7,748.00		Open Hole	6.125	Casing Vol. (bbl)	
Carry Fluid Weight (ppg)		8.4		Propan Content (ppa)				Max Drill Out Size		0

[illegible]